

Listing of the Claims

1. (Currently amended) A method comprising:

generating session information at ~~the~~a control node in response to a request from a client to access a system node and sending the session information to the client, the system node, and a data node if the client and system node satisfy at least one condition for accessing each other;

receiving at the data node a request from the client to access the system node and a request from the system node to access the client; and

establishing a first secure authenticated connection between the client and the system node via the data node based at least in part on the session information.

2. (Previously presented) The method of claim 1, further comprising receiving at the control node a request from the client for the session information.

3. (Previously presented) The method of claim 1, further comprising, prior to receiving the request from the client to access the system node, registering the system node with a control node.

4. (Previously presented) The method of claim 1 further comprising, prior to receiving the request from the client to access the system node,

providing a list of registered system nodes to the client, wherein the system node is selected at the client from the list of registered system nodes.

5. (Original) The method of claim 1, further comprising notifying the system node when a message is received from the client at the data node.

6. (Previously presented) The method of claim 5, further comprising establishing a second secure authenticated connection between the system node and the data node.

7. (Previously presented) The method of claim 6, further comprising sending the message from the data node to the system node over the second secure authenticated connection between the system node and the data node.

8. (Previously presented) A computer program product encoding computer programs for executing on a control node and a data node a computer process, the computer process comprising:

generating session information at the control node in response to receiving a request from a client to access a system node and sending the session information to the client, the system node, and the data node if the client and system node satisfy at least one condition for accessing each other;

receiving at the data node a request from the client to access the system node and a request from the system node to access the client; and

establishing a first secure authenticated connection between the client and the system node via the data node based at least in part on the session information.

9. (Original) The computer program product of claim 8 wherein the computer process at the control node further comprises registering the system node.

10. (Previously presented) The computer program product of claim 8 wherein the computer process at the control node further comprises updating a client database at the control node with a dynamic network address for the system node on a recurring basis.

11. (Previously presented) The computer program product of claim 8 wherein the computer process at the data node further comprises:

notifying the system node when a message is received from the client at the data node;

establishing a second secure authenticated connection between the system node and the data node; and

sending the message from the data node to the system node over the second secure authenticated connection between the system node and the data node.

12. (Previously presented) A system for establishing a secure authenticated network connection between a client and a system node, comprising:

a control node linked to the client and the system node, the control node providing the client and the system node with session information if the client and system node satisfy at least one condition for accessing each other; and

a data node communicatively coupled to the control node, the data node receiving a request from the client to access the system node and a request from the system node to access the client and establishing a first secure authenticated connection between the client and the system node via the data node based at least in part on the session information.

13. (Original) The system of claim 12 wherein the session information includes at least a network address for the system node.

14. (Original) The system of claim 12 wherein the session information includes at least a dynamic network address for the system node.

15. (Original) The system of claim 12 wherein the session information includes a status of the system node.

16. (Previously presented) The system of claim 12 wherein a second secure authenticated connection between the data node and the system node is established in response to the data node receiving a message from the client.

17. (Original) The system of claim 12 further comprising a client database operatively associated with the control node, the client database including a data structure identifying system nodes registered with the control node.

18. (Original) The system of claim 17 wherein the data structure identifies authorized users of the system nodes registered with the control node.

19. (Original) The system of claim 12 further comprising a session database operatively associated with the data node, the session database storing the session information received from the control node.

20. (Previously presented) The system of claim 19 wherein the session information for a client session is removed from the session database when the client session ends.